

REMARKS/ARGUMENTS

Applicant received the Office Action dated January 12, 2004 in which the Examiner rejected claims 1-41 as being anticipated by Parker (U.S. Pat. No. 5,600,231). Applicant amends claims 1, 21-23, 29, 33 and 36 and cancels claims 24, 28 and 32. Based on the amendments and arguments provided herein, Applicant respectfully submits that all pending claims are patentable over the art of record.

The Examiner explained very little about the Examiner's thinking as to how Parker reads on the claims. Accordingly, Applicant finds it difficult to address the Examiner's rejections. Clarifications and amplification of the Examiner's reasoning is respectfully requested if the Examiner continues to reject the claims.

Parker is directed to a battery testing and refreshing device. Parker's device includes a test circuit 22 used to determine the charge level of the battery 30 and to provide an indication of the charge level on a test display 16. Parker's device also includes a refresh circuit 24 used to discharge the battery 30 to a certain charge level. Either circuit can be activated by a user activating a switch 12, 14. When either circuit is activated, the battery 30 conducts current through the active circuit. That is, regardless of which circuit is active, all current flowing through the circuit flows through the battery 30.

As amended, claim 1 describes "a cell protection circuit" that requires, among other things, "a current bypass device coupled to said transistor and said cell," "wherein the current bypass device permits at least a portion of the current to bypass the cell." Claim 1 thus has been amended to more clearly explain the action of the current bypass device. Parker does not teach

or suggest these limitations. Instead, Parker teaches two circuits 22, 24. In both circuits, all available current flows through the cell 30. No portion of the current bypasses the cell 30, as required by claim 1. At least for this reason, claim 1 and dependent claims 2-15 are allowable over Parker.

Claim 16 describes "a protection circuit for a cell" that requires, among other things, "a means for bypassing current around said cell when the voltage across said cell reaches the predetermined threshold." Parker does not teach or suggest any means for bypassing current around the cell 30. Instead, Parker teaches two circuits 22, 24 wherein all current flows through the cell 30 and thus no current is bypassed around the cell 30. At least for this reason, claim 16 and dependent claim 17 are allowable over Parker.

Claim 18 is directed to "a method of protecting a cell" that requires, among other things, "permitting current to conduct through a bypass device coupled in parallel with said cell." Parker does not teach or even suggest this limitation. Instead, Parker teaches a refresh circuit 24 and a test circuit 22, each comprising a cell 30. In both circuits, current flows through the cell 30. No portion of the current is bypassed around the cell 30. At least for this reason, claim 18 and dependent claims 19 and 20 are allowable over Parker. Applicant amended claim 20 to include an inadvertently missing dependency link.

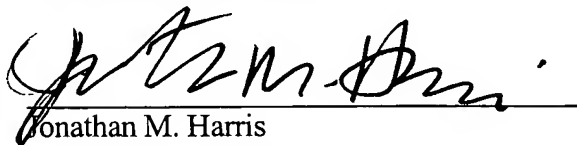
As amended, claim 21 requires, among other things, "a diode coupled in parallel with said transistor and said associated cell to cause current to be automatically diverted from said cell when a voltage meeting or exceeding a threshold voltage of the diode is applied to said diode." Parker does not teach or even suggest these limitations. To the extent that the Examiner considers

Parker's switch 14 akin to the claimed diode¹, the diode of claim 21 is patentably different from the switch 14 of Parker. As claimed, the diode causes "current to be automatically diverted from said cell." Conversely, the switch 14 of Parker must be activated **manually** and thus current is not **automatically** diverted from the cell 30. Further, as explained above, Parker does not even disclose diverting current from a cell, manually or automatically.

As amended, claim 36 describes "a battery cell protection circuit" that requires, among other things, "a bypass device coupled in parallel with the current limiter and cell, said bypass device adapted to direct current flow around said cell." Parker does not teach or even suggest this limitation. Instead, Parker teaches two circuits 22, 24, each comprising a cell 30. In both circuits, all current flows through the cell 30. No portion of the current is bypassed around the cell 30. At least for this reason, claim 36 and dependent claims 37-41 are allowable over Parker.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case. If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Conley Rose Deposit Account Number 03-2769 and enter any time extension(s) necessary to prevent this case from being abandoned.

Respectfully submitted,



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¹ In the Office Action of January 12, 2004, the Examiner referred to Parker's switch 14 as being relevant to patentability.